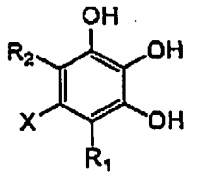
Amendments to the Claims:

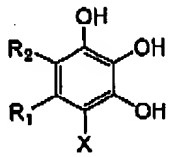
This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

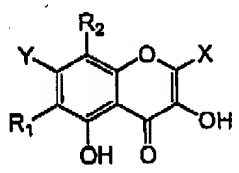
1. (Currently amended) A method of treating ~~a disease selected from~~ Alzheimer's disease ~~and type II diabetes~~, in a mammal suffering there from, comprising administration to the mammal of a therapeutically effective amount of an isolated pure compound selected from the group consisting of the compounds of formula A, formula B, formula C, formula D, and formula E:



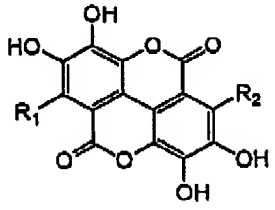
Formula A



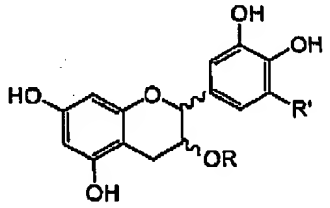
Formula B



Formula C



Formula D



Formula E

where:

R is selected from the group consisting of hydrogen, 2,3-dihydroxybenzoyl, 3,4-dihydroxybenzoyl, 2,3,4-trihydroxybenzoyl, and 3,4,5-trihydroxybenzoyl;

R′ is hydrogen or OH;

R_1 and R_2 are independently selected from hydrogen and non-interfering substituents;

X is selected from hydrogen and the group consisting of

(a) hydroxy, amino, C_{1-6} alkylamino, di(C_{1-6} alkyl)amino, and cycloamino,

(b) C_{1-22} alkyl, C_{1-22} alkoxy, C_{1-22} alkylthio, and C_{1-22} alkylcarboxyl, each optionally substituted with 1 to 5 moieties selected from the group consisting of halogen, hydroxy, mercapto, amino, nitro, C_{1-6} alkoxy, C_{1-6} alkylthio, and C_{1-6} alkylcarboxyl,

(c) aromatic and heteroaromatic groups substituted with 2 or 3 adjacent hydroxy groups, and

optionally substituted with 1 to 5 non-interfering substituents,

(d) sugars, optionally substituted with one or more anionic groups selected from sulfate, phosphate, phosphonate, carboxylate, and sulfonate groups, and

(e) peptides and peptide derivatives, and

Y is hydrogen, hydroxy, C_{1-6} alkoxy, benzyloxy, where the phenyl group is optionally substituted with 1 to 3 substituents selected from halo and C_{1-6} alkyl, or $-OSO_2R_4$, where R_4 is C_{1-6} alkyl or phenyl optionally substituted with 1 to 3 substituents selected from halo and C_{1-6} alkyl;

and the group of compounds consisting of acacetin, actinorhodine, alizarin, alizarin blue, alizarin orange, alizarinsulfonic acid, alkannin, anthragallol, anthralin, anthrarobin, antharufin, apigenin, apigetrin, apiose, baicalein, baptigenin, 1,2,4-benzenetriol, bostrycoidin, carbidopa, carminic acid, carubicin, cellobiose, centaurein, chloranilic acid, chondrosine, chromotrope 2B, chromotropic acid, chrysamminic acid, chrysarobin, chrysin, chrysophanic acid, cichoriin, citrazinic acid, citromycetin, collinomycin, curvularin, cyanidin, cyanidin 3-glucoside, cyanidin 3-rhamnoglucoside, cyanidin 3,5-diglucoside, cyanidin 3-sophoroside, daphnetin, datiscetin, daunorubicin, delphinidin, deoxyepinephrine, diosmetin, diosmin, dioxethedrine, dopa, dopamine, doxorubicin, droxidopa, echinochrome A, embelin, emodin, ergoflavin, eriodictyol, esculetin, fenoldopam, fomecin A, fomecin B, fraxetin, fraxin, fredericamycin A, fumigatin, fusarubin, fuscin, fustin, galangin, gallein, gallocyanine, gardenin A, gardenin B, gardenin C, gardenin D, gardenin E, genistein, gentisin, granaticin, guamecycline, hematein, hydroxysophorobioside, hydroxysophoricoside, icariin, isoquercitrin, kaempferol, kermesic acid, laccaic acid A, laccaic acid B, laccaic acid C, laccaic acid D, leucocyanidin, luteolin, maclurin, menogaril, methylenedigallic acid, morin, oosporein, phenicin, phloroglucide, puberulic acid, puberulonic acid, purpurin, purpurogallin, quercetagetin, quercimritrin, quinalizarin, quinic acid, resistomycin, rhamnetin, rhein, rhodizonic acid, rhodomycin A, rhodomycin B, robinin, ruberythric acid, rufigallol, rutin, scutellarein, tannic acid, tetroquinone, tiron, troxerutin, and tunichrome B1, but excluding pyrogallol,

and the pharmaceutically acceptable salts thereof.

2. (Previously presented) The method of Claim 1 where only one active ingredient compound is administered.

3. (Previously presented) The method of Claim 1 where the mammal is a human.

4-5. (Canceled).

6-16. (Cancelled)

17. (Previously presented) The method of Claim 1 where R_1 and R_2 are independently selected from the group consisting of hydrogen; C_{1-6} alkyl, C_{1-6} alkoxy, and C_{1-6} alkylthio, in each of which the alkyl group is optionally substituted with 1 to 5 halogen atoms; and halo.

18. (Previously presented) The method of Claim 1 where X is selected from hydrogen and the group consisting of

(a) hydroxy, amino, C_{1-6} alkylamino, di(C_{1-6} alkyl)amino, and cycloamino,

(b) C_{1-22} alkyl, C_{1-22} alkoxy, C_{1-22} alkylthio, and C_{1-22} alkylcarboxyl, each optionally substituted with 1 to 5 moieties selected from the group consisting of halogen, hydroxy, mercapto, amino, nitro, C_{1-6} alkoxy, C_{1-6} alkylthio, and C_{1-6} alkylcarboxyl, and

(c) aromatic and heteroaromatic groups substituted with 2 or 3 adjacent hydroxy groups, and optionally substituted with 1 to 5 non-interfering substituents.

19. (Previously presented) The method of Claim 1 where X is selected from hydrogen and the group consisting of hydroxyl and amino.

20. (Previously presented) The method of Claim 1 where Y is selected from the group consisting of hydrogen, hydroxy, C_{1-6} alkoxy, and benzyloxy, where the phenyl group is optionally substituted with 1 to 3 substituents selected from halo and C_{1-6} alkyl and C_{1-6} alkoxy, each optionally substituted with 1 to 5 halogen atoms.

21. (Previously presented) The method of Claim 1 where the compound is a compound of formula A or formula B, or a pharmaceutically acceptable salt thereof.

22. (Previously presented) The method of Claim 21 where the compound is selected from the group consisting of 5-hydroxydopamine, and the pharmaceutically acceptable salts thereof.

23. (Previously presented) The method of Claim 1 where the compound is a compound of formula C or a pharmaceutically acceptable salt thereof.

24. (Previously presented) The method of Claim 23 where the compound is selected from the group consisting of myricetin and quercetin, and the pharmaceutically acceptable salts thereof.

25. (Previously presented) The method of Claim 1 where the compound is a compound of formula D or a pharmaceutically acceptable salt thereof.

26. (Previously presented) The method of Claim 25 where the compound is ellagic acid or a

pharmaceutically acceptable salt thereof.

27. (Previously presented) The method of Claim 1 where the compound is a compound of formula E or a pharmaceutically acceptable salt thereof.

28. (Previously presented) The method of Claim 27 where the compound is selected from the group consisting of catechin, epicatechin, gallocatechin, epigallocatechin, and their gallate esters, and the pharmaceutically acceptable salts thereof.

29. (Previously presented) The method of Claim 1 where the active ingredient is selected from group of compounds consisting of acacetin, actinorhodine, alizarin, alizarin blue, alizarin orange, alizarinsulfonic acid, alkannin, anthragallol, anthralin, anthrarobin, antharufin, apigenin, apigetrin, apiose, baicalein, baptigenin, 1,2,4-benzenetriol, bostrycoidin, carbidopa, carminic acid, carubicin, cellobiose, centaurein, chloranilic acid, chondrosine, chromotrope 2B, chromotropic acid, chrysamminic acid, chrysarobin, chrysin, chrysophanic acid, cichoriin, citrazinic acid, citromycetin, collinomycin, curvularin, cyanidin, cyanidin 3-glucoside, cyanidin 3-rhamnoglucoside, cyanidin 3,5-diglucoside, cyanidin 3-sophoroside, daphnetin, datiscetin, daunorubicin, delphinidin, deoxyepinephrine, diosmetin, diosmin, dioxethedrine, dopa, dopamine, doxorubicin, droxidopa, echinochrome A, embelin, emodin, ergoflavin, eriodictyol, esculetin, fenoldopam, fomecin A, fomecin B, fraxetin, fraxin, fredericamycin A, fumigatin, fusarubin, fuscin, fustin, galangin, gallein, gallocyanine, gardenin A, gardenin B, gardenin C, gardenin D, gardenin E, genistein, gentisin, granaticin, guamecycline, hematein, hydroxysophorobioside, hydroxysophoricoside, icariin, isoquercitrin, kaempferol, kermesic acid, laccaic acid A, laccaic acid B, laccaic acid C, laccaic acid D, leucocyanidin, luteolin, maclurin, menogaril, methylenedigallic acid, morin, oosporein, phenicin, phloroglucide, puberulic acid, puberulonic acid, purpurin, purpurogallin, pyrocatechol, quercetagetin, quercimritrin, quinalizarin, quinic acid, resistomycin, rhamnetin, rhein, rhodizonic acid, rhodomycin A, rhodomycin B, robinin, ruberythric acid, rufigallol, rutin, scutellarein, tannic acid, tetroquinone, tiron, troxerutin, and tunichrome B1, and the pharmaceutically acceptable salts thereof.

30. (Previously presented) The method of Claim 1 where the compound is selected from 1,2,4-benzenetriol, ellagic acid, 5-hydroxydopamine, myricetin, phloroglucide, quercetin, quinic acid, and tannic acid, and the pharmaceutically acceptable salts thereof.